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Dear Customer,

In an effort for continuous improvement, engineering has made several modifications to the 3781 WCPC. Enclosed are detailed installation instructions and an upgrade kit, so you can upgrade your WCPC in the field. The changes are outlined below:

- Replace the screened transport and damper orifices (.014 diameter) with unscreened orifices of .0135 diameter.
- Replace 25 $\mu$ m inlet screen with a 100 $\mu$ m inlet screen.
- Replace small area 73 $\mu$ m transport filter with large area 43 $\mu$ m (instruments manufactured after 10/06 will already have the correct filter installed).
- Install canister filters upstream of the transport orifice.
- Replace the screened flow control orifice with an unscreened version of the same size.

**Note:** Replacement of the flow control orifice (step 13 in the installation instructions) is a fairly difficult procedure. It should only be performed if the user has experienced trouble with flow control orifice clogging. If this has not been a problem for your application, it is best to save the flow control orifice in the kit for later use.

These changes were made to decrease problems related to instrument clogging, and will not affect the flow rate or the data accuracy of the instrument. Accelerated load testing has shown over a 100% improvement in intervals between clogging, and beta customer sites have shown a significant reduction in problems which can be attributed to orifice clogging. TSI still recommends that the WCPC be used downstream of a cyclone to protect the instrument from larger aerosol.

Cyclone: TSI Part Number 1031558  
50% Cut: 3  $\mu$ m @ 0.6LPM

If you are not comfortable upgrading your 3781, the WCPC will be upgraded at no additional charge during annual maintenance and calibration for the standard repair fee. In this case, please return the upgrade kit with the instrument.

I hope you enjoy these improvements, and please contact us if you need any installation assistance, or have any questions.



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